a Visual Plus Corporation Company

EX9

Wireless Radio Keypad

Ver 1.3

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1) PRODUCT DESCRIPTION

EX9-43B

TX2A

RX2

EX9 is a set of wireless rolling code keypad (EX9-43B) as a transmitter and radio receiver RX2. Only enrolled code in the transmitter and memorized in the receiver will activate the relay output. The receiver can also memorize code from the remote transmitter TX2A.

Programming/deleting of the codes, the transmission duration is done at the keypad, memorizing the codes and programming of the relays (time, mode) is done at the radio receiver.

2) TECHNICAL SPECIFICATIONS

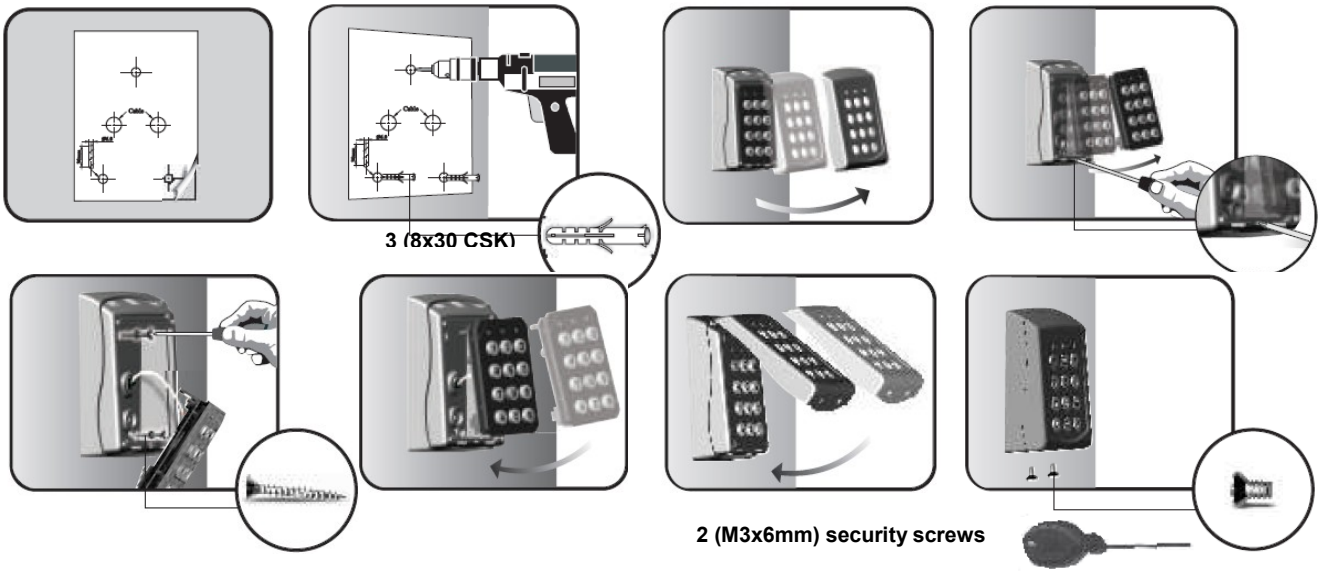
EX9-43B

Keys	Backlit polycarbonate
Channels	10
Programming Master Code	1
Users codes	99
Relays time setup	1 to 10 seconds
Range	120 mt in open space
Green led	Key press/ error and confirmation signal/ transmission in progress
Red led	Keypad locked indicator
Amber led	Configuration menu entrance
Buzzer	1
Power supply	12/24V AC/DC input and/or 9V battery
Max absorption	27mA in transmission with 9V battery 120mA in transmission with 24Vac power supply
IP rating	65
Dimensions (mm)	119,5x83,5x40

RX2

Codifying	Rolling code
Memorisable transmitters	- 1000 with memory - 30 without memory
Power supply	12 Vac/dc Jumper C closed 24 Vac/dc Jumper C open
Consumption	50mA
Channels	2
Antenna	Tuned at 433.92 MHz
Frequency	433.92 MHz
Reach	80 - 250 mt
Relay contact	1A up to 30 Vdc / 0.5A up to 42.4 Vac
Temperature	-10...55 °C

3) MOUNTING



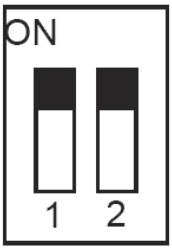
4) TERMINAL BLOCKS AND JUMPER SETTINGS

EX9-43B:

On the back side of the card there is a DIP-SWITCH that allows enabling/disabling the buzzer and the backlighting of the keypad.

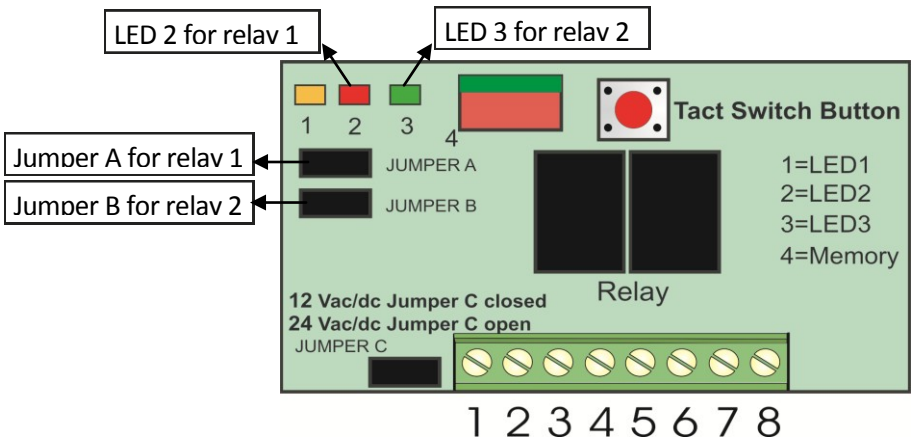
DIP SWITCH 1
On: backlighting ENABLED
Off: backlighting DISABLED

DIP SWITCH 2
On: Buzzer ENABLED
Off: Buzzer DISABLED



Power Supply if battery is not used 12/24VAC/DC

RX2:



1 - 2 RELAY 1 (NO)
3 - 4 RELAY 2 (NO)
5 - 6 POWER SUPPLY 12/24Vac/dc
7 ANTENNA GROUND
8 ANTENNA

Power Supply:

Jumper C closed: **12V** AC/DC
Jumper C open: **24V** AC/DC

5) PROGRAMMING

Entering the programming menu is done by the Master Code which is written on the Sticker on back of the Keypad.

STEP 1)

Add New User in EX9-43B

- Enter the **master code**
- Press **B**
- Press **0**
- Enter the memory location of the user to be memorized **01 to 99**
- Enter the new code (**1**-**8** digits) of the User
- Press **A**
- Press **B** to exit
- Try the Code, press **XXXX+A+1** Green LED will blink indicating that the transmission is in progress

STEP 2)

Send the User into RX2 Reciever

- Press the Tact Switch ones for **Relay1** (LED 1 & 2 ON)
- Press the Tact Switch twice for **Relay2** (LED 2 & 3 ON)
- Enter the User code
- Press **A**
- Enter the User channel (**1** – default)

CODE + A + 1

- LED 2 or 3 blinks 3 times

NOTE: The keypad automatically associates the transmission **channel 1** to every new user

STEP 3)

Send TX2A Code into RX2 reciever

- Press the Tact Switch ones for Relay1 **(LED 1 & 2 ON)**
- Press the Tact Switch twice for Relay2 **(LED 2 & 3 ON)**
- Press TX2A Button
- LED 2 or 3 blinks 3 times

Other settings:

Assign transmission channel

Enter the **master code**
Press **B**
Press **3**
Enter the memory location of the user to be enabled **01 to 99**
Enter the channels to be enabled from **1 to 10 (0)**
Press **A**
Press **B** to exit

XXXX+A+(1)

Transmission duration setup

Enter the **master code**
Press **B**
Press **1**
Enter the transmission time to be enabled from **1s to 10s (0)**
Press **B** to exit

The transmission time is set to 2 seconds by default.
The transmission time setting applies to ALL users and ALL transmission channels

Delete one User

Enter the **master code**
Press **B**
Press **9**
Enter the memory location of the user to be delated **from 01 to 99**
Press **A**
Press **B** to exit

Delete ALL Users

Enter the **master code**
Press **B**
Press **8**
Press **99**
Press **A**
Press **B** to exit

Change Master Code

Enter the **MASTER code** (1-8 digits)
Press **B**
Press **0**
Enter the memory location of the master **00**
Enter the new MASTER code from 1 to 8 figures long
Press **A** (only if the access code is shorter that 8 figures)
Press **B** to exit

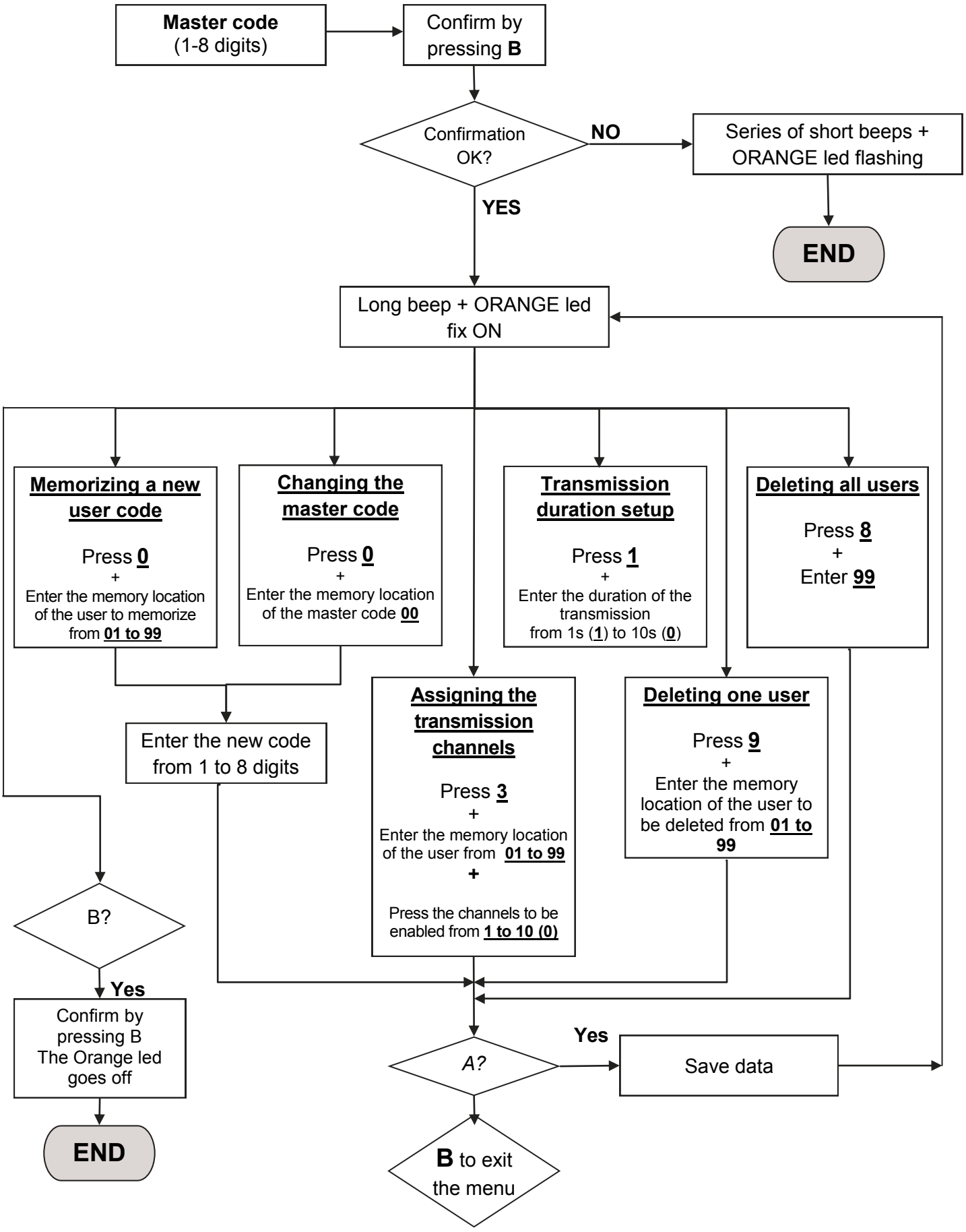
NOTE: Before making any operation, take the sticker you find on the back of the keypad and put it on the space here below (as shown in the drawing) where it is written the master code set by the factory.

Attach here the adhesive or write the master code

NOTE: In case of total reset of the device, the master code will come to be the one indicated. The loss of this code will make the keypad unusable.

MASTER CODE

6) PROGRAMMING FLOWCHART



7) RELAY SETTINGS

MODE 1: **IMMEDIATE** - The relay remains active until the radio signal persists

Jumper A **OPEN** for Relay 1
Jumper B **OPEN** for Relay 2

For **Relay 1**: Press and hold the Tact Switch for 3 sec. Until **LED 1** is ON, **LED 2** blinking

For **Relay 2**: Press and hold the Tact Switch for 3 sec. Until **LED 1** is ON, **LED 3** blinking

Press the Tact Switch ones again to select MODE 1 (FAST Blinking)

Wait until the LED's go OFF

MODE 2: **ON/OFF (Latch)** - the relay remains active until a subsequent command is given or when the transmitter button is pressed once again

Jumper A **CLOSED** for Relay 1
Jumper B **CLOSED** for Relay 2

MODE 3: ON TIME - the relay, once activated, remains active for a programmable time of 3 seconds up to 18 hours

Jumper A **OPEN** for Relay 1
Jumper B **OPEN** for Relay 2

For **Relay 1**: Press and hold the Tact Switch for 3 sec. Until **LED 1** is ON, **LED 2** blinking

For **Relay 2**: Press and hold the Tact Switch for 3 sec. Until **LED 1** is ON, **LED 3** blinking

Press the Tact Switch ones again to select MODE 3 (**SLOW** Blinking)

Take EX9-43B Keypad

Enter the User Code that opens that Relay

Press **A**

Press **1** for beggining of count and the LED will blink with 1 blink per second. Count the seconds to which the relay will be set.

Press **1** for end of count.

Done.

The difference between pressing **1** and again **1** is the relay open time

Take TX2A which opens that relay

Click for beggining of count and the LED will start to blink with 1 blink per second. Count the seconds to which the relay will be set.

Click for end of count.

Done.

The difference between the **2 clicks** is the relay open time

8) TOTAL RESET

Total reset of EX9-43B

Keep reset key pressed

Beep emitted by the keypad → DO NOT release the key

Two Beeps emitted by the keypad → DO NOT release the key

Three Beeps emitted by the keypad → DO NOT release the key

The keypad continuously **Beeps** → Release the key

MOTE: IN CASE OF TOTAL RESET ALL THE USERS ARE DELETED, THE MASTER CODE AND ALL THE SETTINGS ARE RETURN FACTORY DEFAULT.

Total Reset of RX2

1. Cut the power supply of the receiver's card
2. Keep pressed the tact switch button and supply power again to the receiver: led 1 turns on after approximately 5 seconds.
3. Release the button of the receiver
4. Wait for the blinking (2 or 3) of LED1. All codes are cancelled once turned off.

9) OPERATING THE WIRELESS KEYPAD

To operate your wireless keypad, type the **Code** then **A** then the **Number of the transmission channel**.
Example: If your code is 1234, to activate the relay press:

1234 +

A (Long beep) **+**

1 **(**short beep and green led blinks for transmission time)

10) EXAMPLES

Task: Assign User with Code: 1234, to activate relay 2. The Relay 2 has to stay open as long as the radio signal persists, assuming that the Master Code is 5555.

1. Enter the Master Code 5555 and press B, Press 0, press 01, press 1234, press A, press B
2. Take the Radio receiver. OPEN the Jumper B (immediate mode). Press the Tact Switch Button twice and LED1 and LED3 will be on. On the Keypad pres **1234+A+1** and LED3 (green) on the radio Receiver will blink 3 times indicating that the Code is memorized.

Try the Code, press **1234 + A + 1** and **relay 2** will go ON.